

CLAIMS

What is claimed is:

- 5 1. A computer device capable of displaying television programs without the need of running an operating system in advance, comprising:

 a computer keyboard unit comprising a keyboard controller, a low-voltage differential signal (LVDS) transmitter, wherein the LVDS transmitter has an output end connected to a liquid crystal display (LCD) monitor;

- 10 a television tuner module installed in the computer keyboard unit and connected to the keyboard controller, wherein the television tuner module has an output end connected to an audio amplifier having an output end connected to a speaker, wherein the television tuner module is connected to an image processor, which is disposed between the television tuner module and the
- 15 LVDS transmitter, wherein television tuner module is used to transform inputted audio/video signals into digital image signals and analog audio signals, then, the television tuner module outputs the digital image signals and analog audio signals, respectively, to the image processor and the LVDS transmitter, after this, the LVDS transmitter sends low-voltage differential signals to the LCD
- 20 monitor, the analog audio signals are sent to the audio amplifier and then to the speaker; and

- a television control switch installed on the computer keyboard unit and connected to a power switching module, wherein the power switching module has an output end connected to the keyboard controller, and wherein the power
- 25 switching module functions as a controller when the television control switch is

activated to turn on the work power of the keyboard controller, the television tuner module, the image processor, the LVDS transmitter, the LCD monitor, the audio amplifier, and the speaker.

5 2. The computer device capable of displaying television programs without the
need of running an operating system in advance as claimed in claim 1 wherein
the computer keyboard unit comprises an inner circuit comprising a central
processing unit, which communicates with a north bridge chipset, which is
connected with a south bridge chipset and an image-accelerating controller,
10 wherein the south bridge chipset is connected to the keyboard controller and an
audio synthesizer, which is connected to the television tuner module and the
audio amplifier, wherein the image accelerating controller has an output end
connected to the image processor.

15 3. The computer device capable of displaying television programs without the
need of running an operating system in advance as claimed in claim 1 wherein
the computer keyboard unit comprises a computer control switch, and when the
computer control switch is on, the television tuner module, the image processor,
the LVDS transmitter, the LCD monitor, the audio amplifier, the keyboard
20 controller, the speaker, the audio synthesizer, the south bridge chipset, the
north bridge chipset, the central processing unit, and the image accelerating
controller are powered by output voltage of the television tuner module, and
wherein one can execute an application program through Windows interface.

25 4. A computer device capable of displaying television programs without the

need of running an operating system in advance, comprising:

a computer keyboard unit comprising a keyboard controller, a low-voltage differential signal (LVDS) transmitter, wherein the LVDS transmitter has an output end connected to a liquid crystal display (LCD) monitor;

5 a television tuner module installed in the computer keyboard unit and connected to the keyboard controller, wherein the television tuner module has an output end connected to an audio amplifier having an output end connected to a speaker, wherein the television tuner module is connected to an image processor, which is disposed between the television tuner module and the
10 LVDS transmitter, wherein television tuner module is used to transform inputted audio/video signals into digital image signals and analog audio signals, then, the television tuner module outputs the digital image signals and analog audio signals, respectively, to the image processor and the LVDS transmitter, after this, the LVDS transmitter sends low-voltage differential signals to the LCD
15 monitor, the analog audio signals are sent to the audio amplifier and then to the speaker;

a power switching module connected to the keyboard controller to turn on partial or overall work power; and

a remote control signal receiver connected to the keyboard controller,
20 wherein the remote control signal receiver is used to receive remote control signals sent from a remote control to turn on the power switching module, the keyboard controller, the television tuner module, the image processor, the LVDS transmitter, the LCD monitor, the audio amplifier, and the speaker.

25 5. The computer device capable of displaying television programs without the

need of running an operating system in advance as claimed in claim 4 wherein the computer keyboard unit comprises an inner circuit comprising a central processing unit, which communicates with a north bridge chipset, which is connected with a south bridge chipset and an image-accelerating controller, wherein the south bridge chipset is connected to the keyboard controller and an audio synthesizer, which is connected to the television tuner module and the audio amplifier, wherein the image accelerating controller has an output end connected to the image processor.

6. The computer device capable of displaying television programs without the need of running an operating system in advance as claimed in claim 4 wherein the computer keyboard unit comprises a computer control switch, and when the computer control switch is on, the television tuner module, the image processor, the LVDS transmitter, the LCD monitor, the audio amplifier, the keyboard controller, the speaker, the audio synthesizer, the south bridge chipset, the north bridge chipset, the central processing unit, and the image accelerating controller are powered by output voltage of the television tuner module, and wherein one can execute an application program through Windows interface.